



US 20210261345A1

(19) **United States**(12) **Patent Application Publication**
PIETRALA et al.(10) **Pub. No.: US 2021/0261345 A1**(43) **Pub. Date: Aug. 26, 2021**(54) **CONVEYOR PAN****Publication Classification**(71) Applicant: **Caterpillar Global Mining Europe GmbH, Lünen (DE)**(51) **Int. Cl.**
B65G 19/28 (2006.01)(72) Inventors: **Christoph PIETRALA**, Dortmund (DE); **Uwe TILLESSEN**, Kamen (DE); **Eugen BAIER**, Schwelm (DE)(52) **U.S. Cl.**
CPC **B65G 19/28** (2013.01); **B65G 2201/045** (2013.01); **B65G 2207/48** (2013.01)(73) Assignee: **Caterpillar Global Mining Europe GmbH, Lünen (DE)**(57) **ABSTRACT**(21) Appl. No.: **17/252,183**(22) PCT Filed: **May 31, 2019**(86) PCT No.: **PCT/EP2019/025167**

§ 371 (c)(1),

(2) Date: **Dec. 14, 2020**(30) **Foreign Application Priority Data**

Jun. 14, 2018 (EP) 18177807.7

A conveyor pan for a chain scraper conveyor comprises a bottom plate and a pair of side profiles fixed to the bottom plate by welding. The conveyor pan has an increased wear resistance, in particular due to a specific geometry of a weld groove formed between the profile rails of the side profile and the bottom plate. The weld groove extends deeper into each profile rail, resulting in a more durable weld connection during use of the conveyor pan. In addition, a geometry of a pocket member for connecting adjacent conveyor pans and an inspection opening formed in the bottom plate have also been improved to result in an increased strength of the conveyor pan.

